### Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-21, 23, 24, 27, 29-37, and 39 are pending in the application, with claims 1, 15, 17, and 23 being the independent claims. By the foregoing amendment, claims 1, 3, 4, 18, and 23 are sought to be amended. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding rejections and that they be withdrawn.

## Rejections Under 35 U.S.C. § 103

### Erlin in View of Hurta

Claims 1, 4, 5, 10-14, and 20-22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,870,155 to Erlin (hereinafter "Erlin") in view of U.S. Patent No. 6,317,721 to Hurta *et al.* (hereinafter "Hurta"). (*See*, Office Action at pp. 2-4 and 7.) Applicants respectfully traverse these rejections.

Amended independent claim 1 (emphasis added) recites:

A receiver/decoder for use in reception of a television or radio programme or a data file **broadcast by** *a remote centre*, the receiver/decoder including means for interacting with a user's credit or bank card to read first information carried by the user's credit or bank card, and, separate from said means, a further interacting means for interacting with a user's

smartcard to read second information carried by the user's smartcard, said second information being modifiable remotely by said remote centre in response to a payment by means of the user's credit or bank card in order to allow consumption or purchase of the television or radio programme or the data file, wherein said second information includes at least one of subscription right information and deciphering information.

The Office Action concedes that: "Erlin does not disclose the use of a user's smart card or modifying information or a smart card in response to a payment." (Office Action at p. 2.) Turning to Hurta, the Examiner asserts that: "it would have been obvious to one skilled in the art at the time of the invention to utilize the credit card reader of Erlin to read credit information on a smart card as taught by Hurta, thus enabling a smart card to store credit information, and enable the smart card to pay for services at a number of different devices." (Office Action at pp. 2-3.) Applicants dispute this assertion.

As a first point, Applicants note that Hurta is directed to the nonanalogous art of Automatic Vehicle Identification and is intended to be used in an automatic toll collection environment. This is not within the field of television, radio, or data broadcast and reception systems. (See, M.P.E.P. § 2141.01(a).)

Furthermore, Hurta does not disclose, teach, or suggest a system in which the *same* remote centre both: (1) broadcasts a television or radio programme or a data file and (2) modifies information carried by the user's smartcard that includes at least one of subscription right information and deciphering information. Therefore, claim 1 is patentable over Erlin in view of Hurta.

Claims 4, 5, 10-14, 20, and 21 depend directly or indirectly from independent claim 1 and are allowable for at least the same reasons as is independent claim 1 and further in view of their additional distinctive features.

Claim 22 had previously been canceled without prejudice to or disclaimer of the subject matter therein. Therefore, the rejection with respect to claim 22 has been rendered moot.

## Erlin in View of Hurta in Further View of Henderson

Claims 6-9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Erlin in view of Hurta in further view of U.S. Patent No. 5,603,078 to Henderson *et al.* (hereinafter "Henderson"). (*See*, Office Action at pp. 9-10.) Applicants respectfully traverse these rejections.

Claims 6-9 depend directly or indirectly from independent claim 1. Henderson also does not disclose, teach, or suggest a system in which the *same* remote centre both:

(1) broádcasts a television or radio programme or a data file and (2) modifies information carried by the user's smartcard that includes at least one of subscription right information and deciphering information. Therefore, claims 1 and 6-9 are patentable over Erlin in view of Hurta in further view of Henderson; and claims 6-9 are further patentable in view of their additional distinctive features.

## Erlin in View of Hurta in Further View of Holtey

Claims 2, 3, 15, and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Erlin in view of Hurta in further view of U.S. Patent No. 5,491,827 to

Holtey (hereinafter "Holtey"). (See, Office Action at pp. 7-9.) Applicants respectfully traverse these rejections.

As a first point, Applicants note that Holtey is directed to the nonanalogous art of data security in a portable personal computer environment. This is not within the field of television, radio, or data broadcast and reception systems. (See, M.P.E.P. § 2141.01(a).)

Furthermore, claims 2 and 3 depend directly or indirectly from independent claim

1. Holtey does not disclose, teach, or suggest a system in which the *same* remote centre both: (1) broadcasts a television or radio programme or a data file and (2) modifies information carried by the user's smartcard that includes at least one of subscription right information and deciphering information. Therefore, claims 1, 2, and 3 are patentable over Erlin in view of Hurta in further view of Holtey; and claims 2 and 3 are further patentable in view of their additional distinctive features.

Independent claim 15 (emphasis added) recites:

A receiver/decoder for use in a digital satellite television system including a decoder, means to accommodate a credit or bank card carrying a microprocessor, means to interact with said microprocessor when the credit or bank card is inserted into an operative position in said receiver/decoder in order to enable data carried by said credit or bank card to be read and data to be input to the microprocessor carried by said credit or bank card and means to accommodate a smartcard whereby insertion of the smartcard by an end user into the receiver/decoder enables the smartcard to interact with means in said receiver/decoder whereby a product selected by the end user may be delivered to said receiver/decoder and from there to a television set or personal computer to which the receiver/decoder is adapted to be connected, information stored on the smartcard being modifiable in response to payment by means of the credit or bank card.

None of Erlin, Hurta, or Holtey, alone or in combination, discloses, teaches, or suggests a an apparatus configured to receive: (1) a credit or bank card (i.e., not a smartcard)

carrying a microprocessor and (2) a smartcard. Therefore, claim 15 is patentable over Erlin in view of Hurta in further view of Holtey.

Claim 16 depends directly from independent claims 15 and is allowable for at least the same reasons as is independent claims 15 and further in view of the additional distinctive features of claim 16.

#### Erlin

Claims 17 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Erlin. (See, Office Action at pp. 3-4.) Applicants respectfully traverse these rejections.

Independent claim 17 (emphasis added) recites:

A method of providing an order for an item or service comprising, at a receiver/decoder at which information concerning the item or service is received from, reading account information from a bank or credit card, subsequently generating an order request containing information identifying the item or service and said account information from the bank or credit card information, subsequently *verifying the remote centre* and, following verification, subsequently transmitting order information to a remote centre for processing.

The Examiner has provided no prior art teaching of such a claimed method in which a remote center is verified. Rather, in the Office Action, "the examiner takes official notice that the use of DES encryption to verify a transaction via a key and prohibit a 3<sup>rd</sup> party from viewing DES encrypted data is well known in the art." (Office Action at p. 4.) Applicants traverse the Examiner's position. The claimed method of verifying the remote center is different from the Data Encryption Standard (DES). The DES is concerned with encrypting information sent from a first location to a second

location, not with verifying the authenticity of the second location. To the extent that the Examiner persists in this rejection and believes that the prior art teaches such verification, Applicants respectfully request that the Examiner provide evidence of such. Specifically, in the First Office Action in this matter, dated August 28, 2002, the Examiner acknowledged "applicant's claim for foreign priority based on an application filed in Europe on 3/21/1997." Accordingly, as provided for at M.P.E.P. § 2144.03(C), Applicants respectfully request that the Examiner either provide documentary evidence to support his assertion that verifying a remote center was known in the art as of *March* 21, 1997, or remove the present rejection and pass claim 17 to allowance.

Claim 19 depends directly from independent claim 17 and is allowable for at least the same reasons as is independent claim 17 and further in view of the additional distinctive features of claim 19.

## Erlin in View of Merritt

Claim 18 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Erlin in view of U.S. Patent No. 5,475,756 to Merritt (hereinafter "Merritt"). (See, Office Action at p. 11.) Applicants respectfully traverse this rejection.

As a first point, Applicants note that Merritt is directed to the nonanalogous art of transaction execution systems and is intended to be used in an automatic teller machine (ATM) environment. This is not within the field of television, radio, or data broadcast and reception systems. (See, M.P.E.P. § 2141.01(a).)

Furthermore, neither Merritt nor Erlin discloses, teaches, or suggests a random number that is "input by a user" as is claimed in amended claim 18. Therefore, claim 18 is patentable over Erlin in view of Merritt.

### Erlin in View of Thompson

Claims 23, 24, 28, 33, 37, and 39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Erlin in view of U.S. Patent No. 5,633,354 to Thompson (hereinafter "Thompson"). (See, Office Action at pp. 4-6.) Applicants respectfully traverse these rejections.

Amended independent claim 23 (emphasis added) recites:

A remote controller for an item of equipment, comprising:
transmission means for transmitting a user's Personal
Identification (PIN) Number to said item of equipment; and
encryption means for encrypting the PIN number, wherein the
encryption means comprises means for combining the PIN number with
a random number and passing the thus-encrypted PIN number to said
transmission means for subsequent transmission thereby.

The Office Action notes that Erlin "utilizes a DES chip 65 for encrypting the data[.]" (Office Action at p. 4.) Likewise, in Thompson, "[t]he random number is encrypted (or decrypted) using the DES algorithm[.]" (Thompson at col. 7, lines 8-10.)

In contrast, claim 23 recites encryption means that specifically comprise means for combining the PIN number with a random number. As stated at pages 16-17 of Applicants' Amendment and Reply Under 37 C.F.R. § 1.111, filed December 20, 2002 (PTO Prosecution File Wrapper Paper No. 9) (emphasis added), the difference between the encryption means of the present invention and DES is not trivial:

Erlin uses a DES chip 65 to encrypt the output from the remote controller. This is exactly what the present invention seeks to avoid. Amended claim 23 defines a remote controller that includes means for rendering the transmission of a PIN number secure through use of encryption means for encrypting the PIN number. The encryption means include means for combining the PIN number with a random number and passing the thusencrypted PIN number to transmission means for subsequent transmission thereby. Thus, the security means provided in the remote controller is relatively modest. This is because: (a) the likelihood of the transmitted PIN number being intercepted between the remote controller and the item of equipment is relatively low, and (b) the only information which is transmitted in "encrypted form" is a PIN number, which by itself would not be of much use to an interceptor without knowledge of any additional information, such as a bank account number. Accordingly, equipment costs can be kept low, as there is no requirement to provide expensive chips for performing complex encryption techniques, such as DES.

Therefore, claim 23 is patentable over Erlin in view of Thompson.

Claims 24, 33, 37, and 39 depend directly from independent claim 23 and are allowable for at least the same reasons as is independent claim 23 and further in view of their additional distinctive features.

Claim 28 had previously been canceled without prejudice to or disclaimer of the subject matter therein. Therefore, the rejection with respect to claim 28 has been rendered moot.

# Erlin in View of Thompson in Further View of Merritt

Claims 27-32, 34, and 35 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Erlin in view of Thompson in further view of Merritt. (See, Office Action at pp. 11-13.) Applicants respectfully traverse these rejections.

As stated above, Applicants reiterate that Merritt is directed to the nonanalogous art of transaction execution systems and is intended to be used in an automatic teller

machine (ATM) environment. This is not within the field of television, radio, or data broadcast and reception systems. (See, M.P.E.P. § 2141.01(a).)

Furthermore, claims 27, 29-32, 34, and 35 depend directly or indirectly from independent claim 23. Merritt does not teach transmitting an encrypted Personal Identification Number (PIN) as stated in independent claim 23. Both Merritt and the present application use the term "Personal Identification Number (PIN)" in the same manner. In Merritt, "When a customer at the bank 1 registers to obtain an account, he is assigned an account number. ... The customer then chooses or is assigned a personal identification number (PIN), which may be, for example, a four-digit number." (Merritt at col. 3, lines 64-65; and col. 4, lines 6-8.) As the basis for this rejection, however, the Office Action refers to a section in Merritt that relates to authenticating a terminal (e.g., ATM) and host (e.g., bank) to one another. (See, Office Action at pp. 12-13; Merritt at col. 5, lines 18-67 through col. 6, lines 1-20.) This terminal authentication process does not use a PIN. Rather, the terminal authentication process of Merritt us the ATM's serial number S. (See, Merritt at col. 5, lines 18-19.) Therefore, Merritt does not teach transmitting an encrypted Personal Identification Number (PIN) as stated in independent claim 23. Accordingly, claim 23 is patentable over Erlin in view of Thompson in further view of Merritt, and claims 27, 29-32, 34, and 35 are allowable for at least this same reason and further in view of their additional distinctive features.

Claim 28 had previously been canceled without prejudice to or disclaimer of the subject matter therein. Therefore, the rejection with respect to claim 28 has been rendered moot.

# Erlin in View of Thompson in Further View of Hurta

Claims 36 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Erlin in view of Thompson in further view of Hurta. (See, Office Action at pp. 5-6.)

Applicants respectfully traverse this rejection.

Claim 36 depends indirectly from independent claim 23. Hurta does not teach transmitting an encrypted Personal Identification Number (PIN) as stated in independent claim 23. Therefore, claims 23 and 36 are patentable over Erlin in view of Thompson in further view of Hurta; and claim 36 is further patentable in view of its additional distinctive features.

## Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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